

Amendments to the Claims

Prior to substantive examination, Applicants have amended claims 2-16 and 18-28 without any intention of disclaiming equivalents thereof, and cancelled claims 17 and 29-32 without prejudice to their subsequent reintroduction into this application or their introduction into a related application. The following list of claims replaces all prior versions and lists of claims in the application.

List of Claims

1. (Original) A primer designed for use with mRNA comprising a 5' sequence based on a 5' consensus region of the mRNA and a 3' sequence capable of hybridising to a 3' region of the mRNA.
2. (Currently Amended) ~~A~~ The primer according to claim 1, wherein the primer 5' sequence comprises a sequence identical or similar to a sequence of the mRNA 5' consensus region.
3. (Currently Amended) ~~A~~ The primer according to claim 1 ~~or~~ 2, wherein the primer 3' sequence comprises a sequence complementary to the mRNA 3' region.
4. (Currently Amended) A method for generating a cDNA molecule ~~which comprises~~ comprising reverse transcription of transcribing mRNA using a an RT primer according to any of claims 1 to 3 comprising a 5' sequence based on a 5' consensus region of the mRNA and a 3' sequence capable of hybridising to a 3' region of a mRNA.
5. (Currently Amended) A method for recovery of cDNA ~~which comprises~~ comprising:
generating cDNA using a method of claim 4
(a) reverse transcribing mRNA using an RT primer comprising a 5' sequence based on a 5' consensus region of the mRNA and a 3' sequence capable of hybridising to a 3' region of the mRNA, whereby cDNA is generated;[[,]] and
(b) amplifying by PCR amplification of the cDNA using a single primer type.
6. (Currently Amended) ~~A~~ The method according to claim 5, wherein the single primer type comprises a 5' sequence based on the mRNA 5' consensus region.

7. (Currently Amended) A ~~kit for a method according to claim 5, which comprises~~ comprising a supply of primer ~~according to any of claims 1 to 3, comprising a 5' sequence based on a 5' consensus region of an mRNA and a 3' sequence capable of hybridising to a 3' region of the mRNA~~ and one or more ~~of items selected from the group consisting of~~ a supply of dNTP, a supply of reverse transcriptase, a supply of ribonuclease inhibitor, buffer, and RNase-free water.

8. (Currently Amended) A ~~The kit for a method according to claim 6, which comprises a kit according to claim 7, supplemented with~~ further comprising one or more PCR components ~~such as selected from the group consisting of~~ DNA polymerase, PCR buffer, one or more PCR ~~primer~~ (s) primers, and dNTPs.

9. (Currently Amended) A method for recovery of cDNA from mRNA, said method comprising:

(a) ~~reverse transcription (RT) of transcribing~~ mRNA using a an RT primer ~~which includes comprising~~ a sequence identical or similar to ~~the a~~ 5' consensus region of the mRNA and ~~which includes comprising~~ a sequence capable of hybridising specifically to ~~the a~~ 3' region of the mRNA, ~~followed by, whereby cDNA is generated; and~~

(b) amplifying by polymerase chain reaction (PCR) the cDNA using a single primer type ~~to amplify the cDNA.~~

10. (Currently Amended) A ~~The~~ method according to claim 9, wherein in step (b) the cDNA is present as a mixture of molecules or as a single molecule.

11. (Currently Amended) A ~~The~~ method according to claim 10, wherein the mRNA is at least partially denatured before ~~the RT reaction~~ step (a), ~~preferably~~ optionally by heat treatment or a chemical method.

12. (Currently Amended) A method for recovery of DNA fragments from mRNA, said method comprising:

(a) heating a sample comprising an mRNA; ~~followed by,~~

(b) reverse transcribing the mRNA using an RT using a primer which includes comprising a sequence identical to or similar to the a sequence at the a 5' consensus region of the mRNA, followed by, whereby single stranded cDNA is generated; and

(c) amplifying by PCR the single stranded cDNA using a single primer type to amplify the ss cDNA obtained in step (b).

13. (Currently Amended) A The method according to claim 12, wherein in step (c) the ss single stranded cDNA is present as a mixture of molecules or as a single molecule.

14. (Currently Amended) A The method according to ~~any one of claims 9 to 13~~ claim 12, wherein the RT primer used is comprises an oligonucleotide or mixture of oligonucleotides in which a 3' sequence is complementary capable of hybridizing to a 3' region of the template mRNA and in which the 5' sequence comprises sequence identical or similar to the 5' consensus region of the mRNA.

15. (Currently Amended) A The method according to ~~any one of claims 9 to 14~~ claim 9 or 14, wherein the RT primer used is ~~an oligonucleotide or mixture of oligonucleotides in which a~~ comprises a 3' sequence that is complementary to a 3' region of the template mRNA which may optionally include part of the a poly A tail, and in which the 5' primer region has a sequence similar or identical to the 5' region of the mRNA.

16. (Currently Amended) A The method according to ~~any one of claims 9 to 15~~ claim 9 or 14, wherein ~~the RT primer comprises a 5' region comprising one or more sequences used is an oligonucleotide or mixture of oligonucleotides in which a 3' primer region is complementary to a 3' region of the template mRNA and in which the 5' primer region has a sequence similar or identical to a 5' region of the mRNA including the sequence for one or more of selected from the group consisting of a transcriptional start site, a regulatory elements element, a kozak sequence, a translational start codon, any part of the a translated sequence, or and any family specific consensus sequence found in the 5' region.~~

17. (Cancelled)

18. (Currently Amended) ~~A~~ The method according to ~~any one of claims 9 to 17~~ claim 9 or 12, wherein the single primer type used for PCR is identical to, overlapping with, or similar to, the 5' sequence of the RT primer used.

19. (Currently Amended) A method for RT-PCR recovery of cDNA from mRNA in ribosome display complexes, said method comprising:

(a) reverse transcribing mRNA using a an RT primer comprising a 5' sequence which is similar or identical to ~~the~~ a 5' consensus region of the mRNA and comprising a 3' primer region sequence complementary to a 3' region of the mRNA, ~~followed by,~~ whereby single stranded cDNA is generated; and

(b) amplifying by PCR the single stranded cDNA using a single primer type ~~to amplify the ss cDNA obtained in (b).~~

20. (Currently Amended) ~~A~~ The method according to claim 19 wherein in step (b), the ~~ss-DNA~~ single stranded cDNA is present as a mixture or a single molecule.

21. ~~A~~ The method according to claim 19 ~~or claim 20~~, wherein the ribosome display complexes are treated before RT step (a) to make mRNA accessible to one or more primer(s) primers, preferably optionally by at least one of heating and/or by a chemical method.

22. (Currently Amended) A method for recovery of DNA fragments from mRNA in ribosome display complexes, said method comprising:

(a) heating of ribosome complexes, followed by,

(b) reverse transcribing mRNA using an RT ~~using a primer which includes~~ comprising a sequence identical to or similar to ~~the~~ a sequence at ~~the~~ a 5' consensus region of the mRNA, ~~followed by,~~ whereby single stranded cDNA is generated; and

(c) amplifying by PCR the single stranded cDNA using a single primer type ~~to amplify the ss cDNA obtained in (b).~~

23. (Currently Amended) ~~A~~ The method according to claim 22 wherein in step (c) the ~~ss~~ single stranded cDNA is present as a mixture or a single molecule.

24. (Currently Amended) A The method according to ~~any one of claims 19 to 23~~ claim 19 or 22, wherein the ribosome display complex is an antibody-ribosome-mRNA complex.

25. (Currently Amended) A The method according to ~~any one of claims 19 to 24~~ claim 19 or 22, wherein ~~the 5' sequence of the RT primer is a sequence that is similar to or identical to the 5' consensus region of the mRNA, including the sequence of~~ comprises a 5' region comprising one or more sequences selected from of the group consisting of a transcriptional start site, a regulatory elements element, a kozak sequence, a translational start codon, any part of the a translated sequence, and of any family specific consensus sequence found in the 5' region.

26. (Currently Amended) A The method according to ~~any one of claims 19 to 25~~ claim 19 or 22, wherein the single primer type used for PCR is identical to, overlapping with, or similar to, the 5' sequence of the RT primer used ~~for the RT reaction step~~.

27. (Currently Amended) A The method or kit according to any one of claims 4 ~~to 26~~ 4, 5, 7, 9, 12, 19, or 22, wherein the RT primer ~~used for reverse transcription RT is~~ comprises HuRT (SEQ ID NO: 3).

28. (Currently Amended) A The method or kit according to any one of claims 4 ~~to 27~~ 4, 5, 7, 9, 12, 19, or 22, wherein the single primer type ~~used for PCR is~~ comprises Kz1 (SEQ ID NO: 1).

29-32. (Cancelled)